

REMARKS

Detailed response to items of **DETAILED ACTION** of Reference B Office Action includes the following.

Specification

5 1. Claim of a “potable-water valve” has been withdrawn in lieu of an above amendment of the specification to mention a potable water valve that was not mentioned in the specification originally.

Claim Objections

2. The phrase “potable-water valve” has been omitted in response requirement for
10 correction.

Claim Rejections - 35 USC § 103

3. Claims 1-6 and 11-22 as amended by amendment of claim 1 above are submitted as being patentable over **Doumit et al** [US 6,526,807] in view of **Richards** [US 5,190,069] for reasons that include the following:

15 Claim 1 has been amended as new claim 23 to include the limitations of claim 5 that describes spaced apart unique three-probe sensor 14.

Distinctively different with different working relationship of also different parts, **Doumit et al** [US 6,526,807] is limited by its single independent claim to a plurality of “flexible probe means” which are described further in its claim 2 as “electrically 20 nonconductive fiberglass cloth means.” **Richards** [US 5,190,069] is limited by its single independent claim to “a pair of spaced apart electrical conductors” and “at least one detector cell. . . having a raised cup-shaped body portion.”

Applicant’s novel three-probe sensor 14 has unique advantages of a first input probe 16 and a second input probe 17 being structured and spaced apart predeterminedly for 25 effectiveness of communication of current through predeterminedly aqueous liquid to the output probe 15 of three-probe sensors 14 positioned proximate predetermined water plumbing 2 in accordance with knowledge of those skilled in the art. The three-probe sensor

14 can be made to function effectively when merely taped to water plumbing 2. Taping can include taped surfacing of the water plumbing 2. The three-probe sensor 14 can be made to function effectively also when positioned on a pipe clasp 28 or when positioned on a clasp tray 29 as illustrated and described in the specification and in the claims.

5 Leak-probe circuits to leak-probe boards or other control means which can include color coding is common to **Doumit et al** [US 6,526,807], to **Richards** [US 5,190,069], to other leak detectors and also to Applicant. This commonality demonstrates the well-known principle of US and foreign patent laws to the effect that not all components of invention need be new. Otherwise, very little innovation would be patented and progressive 10 objectives of patent laws would not exist. Although it is the hope of a patent, not the granting of a patent, for which patent-law systems are established, the hope must be based realistically on rule of law for motivating human innovation. Within established rules of patent law, working relationships of novelty to known technology, systems, components and devices is allowable for enabling its effective use. As for nearly all patentable subject 15 matter in accordance with US and other patent laws worldwide, Applicant has some similarity to prior art, including **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069], as does **Doumit et al** [US 6,526,807] to **Richards** [US 5,190,069]. Applicant's unique leak-probing features and working relationships of parts are submitted as describing proprietary novelty.

20 Accordingly, probe wires to a control box or board, color coding, use of LEDs, timing of shutoff, numerical displays, communication of probe results to forms of visual leak signalers and related aspects of this invention are described as features which render Applicant's Leak Stopper System operably and uniquely different from **Doumit et al** [US 6,526,807] and/or **Richards** [US 5,190,069] and from other prior art.

25 Applicant's claims 1-6 and 11-22 as amended are patentable over **Doumit et al** [US 6,526,807] due in part to differences of probing means and working relationships thereto. Applicant's claims 1-6 and 11-22 as amended are further yet patentable over **Doumit et**

al [US 6,526,807] in view of **Richards** [US 5,190,069] due in part to yet different probing means and different working relationships of parts of **Richards** [US 5,190,069].

Regarding claim 2, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended, and including the isolated power source by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the isolated power source and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the isolated power source. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the isolated power source.

Regarding claim 3, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 2 above which depends from claim 1 as amended, and including the rechargeable battery by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the rechargeable battery and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the rechargeable battery. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the rechargeable battery.

Regarding claim 4, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 2 above which depends from claim 1 as amended, and including the DC current and the transformer by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the DC current and the transformer and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and

detector cell with a cup-shaped body in working relationship to the DC current and the transformer. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the DC current and the transformer.

5 Regarding claim 5, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 2 above which depends from claim 1 as amended, and including the plurality of probe centers by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the plurality of probe centers and by reason of limitation of

10 **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the plurality of probe centers. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the plurality of probe centers.

15 Regarding claim 6, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended, and including the leak probe circuit and a valve control line in communication with the plumbing valve from the control board of the plumbing valves of **Welch et al** [US 5,229,750] by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe

20 means in working relationship to the plurality of probe centers, by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the plurality of probe centers and by reason of limitation of **Welch et al** [US 5,229,750] to a float system for detecting and controlling leaks. In contrast, Applicant's claim of a three-probe sensor is not discussed or

25 disclosed by or between **Doumit et al** [US 6,526,807], **Richards** [US 5,190,069] and **Welch et al** [US 5,229,750] in working relationship to the leak-probe circuit and the valve control line in communication with the plumbing valve from the control board.

Regarding claim 11, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended, and including the plurality of LEDs by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the isolated power source and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the isolated power source. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the plurality of LEDs.

Regarding claim 12, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended, and including the audio signaler (audio alarm 52) by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the audio signaler and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the audio signaler. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the audio signaler.

Regarding claim 13, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended, and including the remote control (portable household electronic devices) by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the remote control and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the remote control. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the remote control.

Regarding claim 14, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended, and including the network (the global computer network such as the Internet or intranets) by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the network and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the network. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the network.

Regarding claim 16, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the plurality of signal lines and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the plurality of signal lines. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the plurality of signal lines with each of the signal lines having electrical communication from a predetermined leak sensor to a predetermined signaler.

Regarding claim 17, all of Applicant's claimed subject matter is not discussed between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the circuit attachment for attaching the leak-probe circuit to the water plumbing and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the circuit attachment for attaching the leak-probe circuit to the water plumbing. In contrast, Applicant's claim of a three-probe sensor is not discussed or

disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the circuit attachment for attaching the leak-probe circuit to the water plumbing.

Regarding claim 18, all of Applicant's claimed subject matter is not discussed

5 between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 17 and including the pipe clasp by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the pipe clasp and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the pipe clasp. In contrast, 10 Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the pipe clasp.

Regarding claim 19, all of Applicant's claimed subject matter is not discussed

between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 17 15 and including the clasp tray by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the clasp tray and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the clasp tray. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between 20 **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the clasp tray.

Regarding claim 20, all of Applicant's claimed subject matter is not discussed

between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 19 and including the pipe clasp by reason of limitation of **Doumit et al** [US 6,526,807] to its 25 flexible probe means in working relationship to the pipe clasp and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the pipe clasp. In contrast,

Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the pipe clasp.

Regarding claim 21, all of Applicant's claimed subject matter is not discussed

5 between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 17 and including the adhesive by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe means in working relationship to the adhesive and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the adhesive. In contrast, Applicant's
10 claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the adhesive.

Regarding claim 22, all of Applicant's claimed subject matter is not discussed

between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in respect to claim 1 as amended by reason of limitation of **Doumit et al** [US 6,526,807] to its flexible probe
15 means in working relationship to the electronic circuit and by reason of limitation of **Richards** [US 5,190,069] to its pair of spaced apart electrical conductors and detector cell with a cup-shaped body in working relationship to the electronic circuit. In contrast, Applicant's claim of a three-probe sensor is not discussed or disclosed by or between **Doumit et al** [US 6,526,807] and **Richards** [US 5,190,069] in working relationship to the
20 electronic circuit for communicating leak detection by the leak sensors (three-probe sensors) to the visual leak signalers and for conveying shutoff communication to the shutoff valve.

4. Claims 7 and 8 as amended constructively by amendment of claim 1 from which

claim 6 depends, are submitted as being patentable over **Doumit et al** [US 6,526,807] in
25 view of **Richards** [US 5,190,069] and further in view of **Diduck** (US 6,025,788) under 35 U.S.C. 103(a) for reasons that include the following:

Claim 1 has been amended as new claim 23 to include the limitations of claim 5 that

describes spaced apart unique three-probe sensor 14.

Structurally different with different working relationship of also different parts, **Doumit et al** [US 6,526,807] is limited by its independent claim 1 to a plurality of “flexible probe means” which are described further in its claim 2 as “electrically nonconductive 5 fiberglass cloth means.” **Richards** [US 5,190,069] is limited by its independent claim 1 to “a pair of spaced apart electrical conductors” and “at least one detector cell. . . having a raised cup-shaped body portion.” **Diduck** [US 6,025,788] also does not include, describe or suggest Applicant’s three-probe sensor 14, but is limited instead to conventional sensors.

Applicant’s override switch is described in combination with the three-probe sensor

10 **14** with unique advantages of being structured for positioning with a first input probe 16 and a second input probe 17 spaced apart predeterminedly for effectiveness of communication of current through predeterminedly aqueous liquid to the output probe 15 of three-probe sensors 14 positioned proximate predetermined water plumbing 2 in accordance with knowledge of those skilled in the art. Applicant claims an override switch 15 in combination with the three-probe sensor 14, not an override switch separately or in combination with **Doumit et al** [US 6,526,807], **Richards** [US 5,190,069] and/or **Diduck** [US 6,025,788].

Regarding claim 8, Applicant claims a pushbutton toggle switch in combination with the three-probe sensor 14 and also the override switch, not a pushbutton toggle switch 20 separately or in combination with **Doumit et al**, **Richards** and/or **Diduck**.

5. Claims 9 and 10 as amended constructively by amendment of claim 1 from which they depend through claims 6 and 7, are submitted as being patentable over **Doumit et al** [US 6,526,807] in view of **Richards** [US 5,190,069] and further in view of **Faulk** [US 5,568,825] under 35 U.S.C. 103(a) for reasons that include the following:

25 Structurally different with different working relationship of also different parts, **Doumit et al** [US 6,526,807] is limited by its single independent claim to a plurality of “flexible probe means” which are described further in its claim 2 as “electrically

nonconductive fiberglass cloth means.” **Richards** [US 5,190,069] is limited by its single independent claim to “a pair of spaced apart electrical conductors” and “at least one detector cell . . . having a raised cup-shaped body portion.” **Faulk** [US 5,568,825] also does not include Applicant’s three-probe sensor **14**, but is limited instead to a flow sensor.

5 Applicant’s override time regulator is described in combination with the three-probe sensor **14** with unique advantages of being structured and spaced apart predeterminedly for effectiveness of communication of current through predeterminedly aqueous liquid to the output probe **15** of three-probe sensors **14** positioned proximate predetermined water plumbing **2** in accordance with knowledge of those skilled in the art. Applicant claims an
10 override time regulator in combination with the three-probe sensor **14** and the override switch, not an override time regulator separately or in combination with **Doumit et al**, **Richards** and/or **Faulk**.

Regarding claim 10, Applicant’s claimed rotational knob is not disclosed in a combination of nor discussed between **Doumit et al** [US 6,526,807], **Richards** [US 15 5,190,069], **Diduck** (US 6,025,788) and/or **Faulk** [US 5,568,825].

Applicant’s rotational knob is described in combination with the three-probe sensor **14** with unique advantages of being structured and spaced apart predeterminedly for effectiveness of communication of current through predeterminedly aqueous liquid to the output probe **15** of three-probe sensors **14** positioned proximate predetermined water plumbing **2** in accordance with knowledge of those skilled in the art. Applicant claims an
20 override time regulator which can include the rotational knob in combination with the three-probe sensor **14** and the override switch, not a rotational knob separately or in combination with an override time regulator separately or in combination with **Doumit et al**, **Richards**, **Diduck** and/or **Faulk**.

25 6. The prior art made of record and not relied upon has been reviewed and found not to anticipate Applicant’s combination of a unique three-probe sensor **14** with described control means for reasons that include the following:

Doumit et al [US 6,147,613] discloses a system in combination with flexible probes for early detection of water leaks.

Caise et al [US 6,105,607] discloses a microprocessor-based control system to monitor flow in a potable water system and compares the flow with pre-set programs of 5 time of day and duration of flow.

Welch Jr., et al [US 5,229,750] discloses a float system for detection of water leaks being comprised of valves for shutting off water supply to appliances.

CONCLUSION

In light of factors that include the above, it is requested that this application as 10 amended and described in claims now numbered 23-42 be reconsidered for allowance.